

2008 Rulemaking Proceedings on Appliance Efficiency Regulations Docket No. 07-AAER-3

Efficiency Committee Workshop

California Energy Commission
Sacramento, CA | July 16, 2008

Consumer Electronics Association (CEA)

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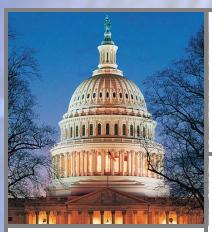
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About CEA













- CEA represents more than 2,200 companies in the \$161 billion U.S. consumer electronics industry
- Membership includes component suppliers, device manufacturers, retailers and distributors, service providers
- Most of CEA's members are small and medium-sized businesses





Workshop Participation

- As the CEC knows, industry conferences and commitments this week made it difficult for most of our TV-related members to attend.
- CEA and its members are committed to energy efficiency, engagement with the CEC and other California policy makers, and participating in the 2008 rulemaking.





CE Industry Contributions

- Committed to working with CEC and other stakeholders
- Actively engaged in efforts to "do the right thing" – improve efficiency, reduce consumption
- Supportive of market-oriented approaches that transform the market
- Introduced proposal before CEC for 2008





Consumer Electronics Industry Approaches & Initiatives

- 1. Voluntary, market-oriented programs:
 - ENERGY STAR
- 2. Research and analysis:
 - Completed two major studies: (1)
 Primary energy use of CE products, and
 (2) Energy savings, emissions reduction
 benefits of using CE products for
 teleworking and e-commerce

Consumer Electronics Industry Approaches & Initiatives, cont'd

- 3. Standards developed by industry:
 - TV power consumption measurement (IEC 62087 Ed.2)
 - STB power consumption measurement
- 4. Consumer education:
 - myGreenElectronics.org (energy use calculator for CE products; energy-savings tips for consumers)

Consumer Electronics Industry Approaches & Initiatives, cont'd

- 5. Promotion of energy-efficient products:
 - Eco-design award at CES
 - Conference sessions
 - Product and technology promotion
- 6. Outreach and coordination:
 - Governments, NGOs, researchers, utilities





Energy Star for TVs

- Collaborative, two-year effort
- Now addresses active mode in addition to standby
- TVs tested at factory-default settings, encouraging shipment of TVs in lower energy-consuming modes





Energy Star for TVs

- Effective November 1, 2008
- Compliant product available for upcoming high-demand sales periods
- Tier 2 effective date built in to new specification; new specification again will be vetted through a broad stakeholder forum





Energy Star: Advantages

- Voluntary, market-driven and international
- Government-industry partnership
- Captures broad range of consumer electronics product categories
- Strong participation by manufacturers
- Well-recognized by consumers
- Competitive incentive for energy savings
- Consideration of active mode power in addition to standby mode power





Energy Star

- Growing and more active than ever
- Product specifications recently completed:
 - Televisions
 - Set-top boxes
 - External power supplies
- Product specifications under revision:
 - Computers
 - Monitors
 - Imaging equipment





Energy Star: Achievements

Electronics are an Energy Star success story

ENERGY STAR	ENERGY SAVED 2006 (BILLION KWH)	EMISSIONS AVOIDED 2006 (MILLION METRIC TONS OF CARBON EQUIVALENT)
Consumer Electronics	12.3	2.4
Residential Appliances	0.6	0.1
Residential Office Equipment	6.3	1.2
Lighting	11.3	2.2
Heating and Cooling	7.6	2.4
Commercial Appliances	1.3	0.3
Office Equipment	28.5	5.6
Commercial Lighting	1.7	0.3
Other	5.5	1.0

Source: U.S. Environmental Protection Agency's latest ENERGY STAR Annual Report





Energy Star

- The Energy Star program for consumer electronics has proven to be the best and most effective approach for saving energy and reducing greenhouse gas emissions.
- The Energy Star program effectively drives energy use down to the lowest levels possible without harming innovation, sacrificing consumer choice, or impeding product convergence.





- Does not actually provide "comprehensive technical, economic, market and infrastructure information"
- Relies on deficient data set!
- Data is neither a fair nor accurate representation of what is on the market now, let alone what will be on the market in the near or medium term





- As PG&E admits:
 - All of its data sets are different (many relevant variables, including display technology, test procedures, test conditions, display resolution, date of manufacture, etc.)
 - TV models may be represented more than once – "impossible to distinguish how many unique models"





- As PG&E admits:
 - No accounting for natural market improvements (improvements in existing technology as well as introduction of new technology)
- In addition, no accounting for impact of new ENERGY STAR Version 3.0 specification for TVs





- Mandates arbitrary power limit for TVs in active mode
- Bans non-compliant products at the expense of innovation, convergence and consumer choice and consumer preference





- ENERGY STAR specification line removed from graphs in PG&E revised proposal
- Undermines the successful and popular ENERGY STAR program
 - TV specification resulted from a broad, collaborative stakeholder effort





 Has the Commission thoroughly considered all issues and implications involved in PG&E's mandatory approach?





- Would exclude 50-65% of televisions available to consumers today
- Impacts all sizes of TVs
- Large impact on two classes of TVs: inexpensive flat panel TVs over 40" and feature-rich sets over 40"; each impact poses particular problems for the consumer market





- No thorough analysis or consideration of major issues such as:
 - Negative impact on consumers
 - Adverse effects on retailers, independent dealers, distributors and custom installers
 - Adverse impact on commerce
 - Adverse impact on innovation





- Tax revenue loss impacts could be in the hundreds of millions of dollars annually over the next 10 years
 - 1.2M TVs sold in CA annually (>40")

\$1,500 average price (>40")

7.5% sales tax

\$135M (let alone accessory sales)





Impact of PG&E Proposal







CEA Proposal

- CEA Proposal made July 1st
- Mandatory reporting of energy use data
- Energy use disclosures
- Educational campaign





CEA Proposal: Data Reporting

- Any manufacturer intending to sell a digital television in the state must submit an energy use declaration for each model prior to sale (model no., display technology, active mode power draw according to IEC 62087 Ed. 2)
 - Improves market surveillance and understanding of energy efficiency trends; no "masking" of data





CEA Proposal: Disclosures

 CEA welcomes the Commission to review and contribute to industry's recommendations and research supporting energy use disclosure requirements for televisions.





CEA Proposal: Education

- Partner with industry and other stakeholders on a major consumer education campaign in California designed to support and encourage consumer purchases of televisions meeting the new ENERGY STAR specification that becomes effective November 1, 2008
 - Time is right: Major television sales periods upcoming





Drivers for Market Transformation

Key drivers of energy efficiency in consumer electronics:

- 1. Innovation, technological advances
- 2. Voluntary, market-oriented programs and initiatives





Consumer Electronics Market

- Rapid innovation
- Dynamic marketplace
- Highly competitive industry
- Significant time-to-market pressures
- Significant cost pressures
- Rapid rates of market penetration
- Rapid transition from one technology to another





The Problems with Regulation of Technology

- Government regulation and mandatory limits never keep pace with technology
- Product definitions change
- Products converge, new product categories emerge
- Technical complexities particular to consumer electronics
- Operating modes and functions change





